

Claims

1. An adhesion preventive material comprising a cross-linking polysaccharide derivative containing at least one active ester group introduced in a polysaccharide side chain, which is capable of reacting with an active hydrogen-containing group, and being capable of forming a crosslinked material due to covalent binding of the active ester group and an active hydrogen-containing group upon contact with water under an alkaline condition.

2. The adhesion preventive material according to claim 1, wherein the hydrogen active-containing group is a hydroxyl group in a polysaccharide molecule, and the polysaccharide derivative is self-crosslinking.

3. The adhesion preventive material according to claim 1 or 2, wherein the active hydrogen-containing group is an active hydrogen-containing group on the biological surface, and the polysaccharide derivative has adhesiveness to the biological surface.

4. The adhesion preventive material according to any one of claims 1 to 3, wherein the active ester group is an ester group in which an electrophilic group is bound to carbonyl carbon thereof.

5. The adhesion preventive material according to claim 4, wherein the electrophilic group is a group introduced from an

N-hydroxyamine based compound.

6. The adhesion preventive material according to any one of claims 1 to 5, wherein the polysaccharide derivative contains the active ester group in an amount of from 0.1 to 2 mmoles/g on the basis of the dry weight thereof.

7. The adhesion preventive material according to any one of claims 1 to 6, wherein the polysaccharide derivative further contains a carboxyl group and/or a carboxyalkyl group.

8. The adhesion preventive material according to any one of claims 1 to 7, wherein the polysaccharide derivative is of a non-salt type.

9. The adhesion preventive material according to any one of claims 1 to 8, wherein a raw material polysaccharide into which the active ester group is introduced is a polysaccharide which is soluble in an aprotic polar solvent at a temperature between 60 °C and 120 °C in a non-salt type thereof in a precursor stage of the crosslinking polysaccharide derivative containing a carboxyl group and/or a carboxyalkyl group.

10. The adhesion preventive material according to any one of claims 1 to 9, wherein the raw material polysaccharide into which the active ester group is introduced is a polysaccharide which contains neither a carboxyl group nor a carboxyalkyl group by itself.

11. The adhesion preventive material according to any one of claims 1 to 10, wherein the alkaline condition is in the

pH range of from 7.5 to 12.

12. An adhesion preventive material comprising a cross-linking polysaccharide composition containing (A) the cross-linking polysaccharide derivative as defined in any one of claims 1 to 11 and (C) a polymer other than the polysaccharide derivative (A).

13. An adhesion preventive material comprising a cross-linking polysaccharide composition containing (A) the cross-linking polysaccharide derivative as defined in any one of claims 1 to 11 and (B) a pH adjuster in a non-mixed state with the polysaccharide derivative (A).

14. The adhesion preventive material comprising a cross-linking polysaccharide composition according to claim 13, which further contains (C) a polymer other than the polysaccharide derivative (A).